Authors' Index

Ahtee, Liisa 367
Antopol, W. 97

Bahr, C. von 177
Bashour, F.A. 336
Bates, H.M. 164
Bauer, V. 281
Berger, F.M. 164
Blum, K. 294
Borga, O. 177
Braun, G. 52
Braun, U. 312

Calhoun, W. 294
Carlini, E.A. 115
Chiariello, M. 159
Condorelli, M. 159
Cooney, D.A. 85
Cottrell, Marilyn 357

Daniels-Severs, A. 348
Datta, R.K. 97
Diamantis, W. 164
Djahanguiri, B. 374
Drew, W.G. 41, 65
Dubinsky, B. 204

Fellenius, E. 177
Feller, D.R. 129
Formento, M.L. 201
Fulginiti, S. 138

Gardey-Levassort, C. 107
Geumei, Aida 336
Giuliano, H. 145
Goldberg, M.E. 204
Goodwin, A. 348
Goulding, Ailsa 257

Hadházy, P. 285
Hemmati, M. 374
Herman, E.H. 85
Himberg, J.J. 367
Hohenegger, M. 27, 270
Holzer, F. 270
Hudgins, Patricia M. 262

Ihli, Margarita 240
Irvine, R.O.H. 257
Iturriaga, H. 275

Jukes, Christine 257

Kadlec, O. 281
Kalbhen, D.A. 312
Karniol, I.G. 115
Keil, L.C. 348
Kletzkin, M. 164
Kolodej, A. 325
Kowalewski, K. 325
Krstić, M.K. 16

Lechat, P. 107
Lee, I.P. 85
Lubawy, W.C. 129

Marichich, Erna S. 233
Masur, J. 35
McDonald, T.P. 357
Meng, K. 193
Merrit, J.H. 294
Mhatre, R.M. 85
Miller, L.L. 41

Nafrawi, A.G. 336
Nasello, Antonia G. 233
Nikulcheva, N.G. 217
Nykänen, P.T. 367

O'Dea, K. 193
Olive, G. 107
Orsingher, O.A. 138

Paasonen, M.K. 367
Pereda, T. 275
Perez, G. 159
Pinelli, A. 201
Pino, M.E. 275
Plekss, O.J. 164
Polgar, P. 317

Rao, S.L.N. 317
Rengo, F. 159
Rezwani, A. 374
Robichaud, R.C. 204
Rodrigues, H. 226
Rovenský, J. 300
Rowland, M. 177
Rutenburg, A.M. 317
Ryzhenkov, V.E. 217

Saccà, L. 159
Sageghi, D. 107
Schuster, J. 240
Šeferna, I. 281
Soares de Moura, R. 226
Sofia, R.D. 164
Sollero, L. 226
Spencer, H.J. 164
Stančiková, M. 80
Swamy, B.V. 336

Tauber, P. 1
Trnaský, K. 80, 300
Türker, R.K. 306

Ugarte, G. 275

Vernikos-Danellis, J. 348
Volicer, L. 317

Wallace, J.E. 294
White, R.P. 65
Williams, Patricia B. 262
Woodard, Dolores 357

Authors' Index

Ahtee, Liisa 367
Antopol, W. 97

Bahr, C. von 177
Bashour, F.A. 336
Bates, H.M. 164
Bauer, V. 281
Berger, F.M. 164
Blum, K. 294
Borga, O. 177
Braun, G. 52
Braun, U. 312

Calhoun, W. 294
Carlini, E.A. 115
Chiariello, M. 159
Condorelli, M. 159
Cooney, D.A. 85
Cottrell, Marilyn 357

Daniels-Severs, A. 348
Datta, R.K. 97
Diamantis, W. 164
Djahanguiri, B. 374
Drew, W.G. 41, 65
Dubinsky, B. 204

Fellenius, E. 177
Feller, D.R. 129
Formento, M.L. 201
Fulginiti, S. 138

Gardey-Levassort, C. 107
Geumei, Aida 336
Giuliano, H. 145
Goldberg, M.E. 204
Goodwin, A. 348
Goulding, Ailsa 257

Hadházy, P. 285
Hemmati, M. 374
Herman, E.H. 85
Himberg, J.J. 367
Hohenegger, M. 27, 270
Holzer, F. 270
Hudgins, Patricia M. 262

Ihli, Margarita 240
Irvine, R.O.H. 257
Iturriaga, H. 275

Jukes, Christine 257

Kadlec, O. 281
Kalbhen, D.A. 312
Karniol, I.G. 115
Keil, L.C. 348
Kletzkin, M. 164
Kolodej, A. 325
Kowalewski, K. 325
Krstić, M.K. 16

Lechat, P. 107
Lee, I.P. 85
Lubawy, W.C. 129

Marichich, Erna S. 233
Masur, J. 35
McDonald, T.P. 357
Meng, K. 193
Merrit, J.H. 294
Mhatre, R.M. 85
Miller, L.L. 41

Nafrawi, A.G. 336
Nasello, Antonia G. 233
Nikulcheva, N.G. 217
Nykänen, P.T. 367

O'Dea, K. 193
Olive, G. 107
Orsingher, O.A. 138

Paasonen, M.K. 367
Pereda, T. 275
Perez, G. 159
Pinelli, A. 201
Pino, M.E. 275
Plekss, O.J. 164
Polgar, P. 317

Rao, S.L.N. 317
Rengo, F. 159
Rezwani, A. 374
Robichaud, R.C. 204
Rodrigues, H. 226
Rovenský, J. 300
Rowland, M. 177
Rutenburg, A.M. 317
Ryzhenkov, V.E. 217

Saccà, L. 159
Sageghi, D. 107
Schuster, J. 240
Šeferna, I. 281
Soares de Moura, R. 226
Sofia, R.D. 164
Sollero, L. 226
Spencer, H.J. 164
Stančiková, M. 80
Swamy, B.V. 336

Tauber, P. 1
Trnaský, K. 80, 300
Türker, R.K. 306

Ugarte, G. 275

Vernikos-Danellis, J. 348
Volicer, L. 317

Wallace, J.E. 294
White, R.P. 65
Williams, Patricia B. 262
Woodard, Dolores 357

Subject Index

Acetazolamide 193
Acetylcholine 233, 306
Acetylcholine release 285
ACTH 348
Adenyl cyclase 285, 317
Adrenaline 16
Adrenergic blocking agents 145
Adrenergic receptors 145
Aggressive behavior 204
Alanine aminopeptidase 300
Albumin, bovine 80
Alderlin 16
Amiloride 27, 257
γ-Aminobutyric acid 233
Aminorex 240
Amphetamine 138, 312
Angiotensin 226
Angiotensin II 306
Antagonists 240
Antidepressant actions 65
Antihyaluronidase effect 74
Anti-inflammatory 164
Anti-inflammatory drugs 300
Antinicotinic action 281
Antiphlogistic/antirheumatic drug 74
Aprotinin 1
Arecoline 16
Arrhythmia, mechanism of 145
Aspirin 164, 374
Atropine 16, 233
Atropine-sensitive receptors 16
Aurothiosulfate, sodium 300

Bethanechol chloride 325
Binding spectra 129
Biogenic amines 294
Brain microsomes 97
Brain mitochondria 97
Brain nuclei 97
Brain soluble surpernatant 97
Brain stimulation 204
Bretylium tosylate 16
Burimamide 306

Canine stomach, totally isolated 325
Cannabis 35
Carotid artery 317
Catecholamines 16, 145
Catecholamine metabolism 52
Catecholamine stores 217
Catechol-*o*-methyltransferase 262
Cerebrospinal fluid 107
Chloroform-epinephrine ventricular fibrillation in dogs 145
Chlorothiazide 193
Chlorpromazine 204
Chronic stress 348
Chronotropic responses 285
Clot retraction 357
^{14}C-norepinephrine 262
Cocaine 16
Cold 348
Corticosterone 348
Crowding 348
Cyclazocine 65
Cyclic AMP 317
Cytochrome P-450 177

Darenthin® 16
Dehydroepiandrosterone 201
Deoxyribonuclease 97
Desoxycorticosterone acetate 262
Dibenamine 138, 145, 233
Dibutyryl cAMP 285
3′,4′-Dihydroxy-2-methylpropiophenone 262
3,4-dihydroxyphenylethanol 294
3,4-Dimethoxyphenylethylamine (DMPEA) 52
Dimethylphenylpiperazinium 16
Disulfiram 374
Diuretic 164
Diuretics 193, 257
Dopamine 294
Drug metabolism 177

E. coli endotoxin 85
E. coli L-asparaginase 85
EEG 65
Effective concentrations 193
Enantiomers 129
Endotoxin toxicity 85
Epinephrine 145
Eserine 233
Ethacrynic acid 193
Ethanol 294
Ethanol metabolism 275
Ether anesthesia 348
Extracellular water 257

Fenamates and indomethacin 80
FFA mobilization 217
Free fatty acids 159
Furosemide 193, 270

GABA 233
Ganglionic transmission 285
Gastric HCl 325
Gastric pepsin 325
Gastric ulceration 374
Glucagon 285
Glucose 159
Glutamic acid 233
Gold salts 300
Guanethidine 16

Habituation 41
Hallucinogens 312
Halothane 275
Heart perfusion 367
Heme-linked enzymes 201
Hemicholinium dibromide 16
Hemorrhagic shock 226
Hepatic arterial flow 336
Hexamethonium 233, 281
Hexobarbital 129
Histamine 240, 306, 325
Homologous perfusion of the stomach 325
H_2-receptors 306
Hydralazine 138
Hydrochlorothiazide 257
Hydrocortisone 226, 262
5-Hydroxyindoleacetic acid 107
5-Hydroxytryptamine 240
5-Hydroxytryptophan 107
Hypertension, spontaneous 367
Hypotension 85
Hypothalamus 204

Imipramine 65, 204
Indomethacin 164
Induction 177
Insulin 159
Interaction 129
Iproniazid 262
Ismelin® 16
Isoproterenol 145
Isotonic fluid absorption 193

K^+ distribution 257
Kidney 193

Lactate dehydrogenase 300
L-asparaginase toxicity 85
Learning 138
Leucine aminopeptidase 300
Lipolysis 217
Liver 312
Liver microsomes 97
Liver mitochondria 97
Liver nuclei 97
Liver soluble supernatant 97
L-lysin-*p*-nitroanilide 80
Localization 317
Lysosomes 1

Malic enzyme 275
Marihuana 115

Mepyramine 306
Metabolism 129
Metabolism of phenylallyl derivatives 312
Methadone hydrochloride 97
Methamphetamine 65
α-Methyldopa 374
α-Methyl tyrosine 233
Methysergide 233, 244
Micropuncture 193
Mitochondrial α-glycerophosphate oxidase 275
Monoamine oxidase 262
Myristicin 312

NADH oxidation 275
Narcotic antagonists 65
N-benzoyl-*DL*-arginine-*p*-nitroanilide 80
Nephrotoxicity 300
Nethalide 233
Nicotine 16, 138, 281, 357
Nonsteroidal antirheumatic drugs 80
Noradrenaline 16, 233, 306
Noradrenaline metabolism 367
Noradrenaline uptake 367
Norepinephrine 145, 226
Nortriptyline 177
Nutmeg 312

Papaverine 138
Papaverine *in vivo* 281
p-Chlorophenylalanine 107
p-Cl-phenylalanine 233
Pentagastrin 325
Pentosan polysulfate 74
Pepsin/HCl ratio 325
Peripheral mechanisms 138
Pharmacokinetics 177
Phenobarbital 177
Phenoxybenzamine 16
Phentetramine 145
Phentolamine 226, 240
Phenylbutazone 164
Phenylephrine 145, 226
Phosphodiesterase 317
Physostigmine 65
Pilocarpine 281
Pituitary-adrenal system 348
Platelets 357
Plg activator 1
Portal venous flow 336
Potassium 257
Potassium balance 270
Potassium-escape phenomenon 27
Pregnandiol 201
Probenecid 107
Progesterone 262
Promethazine 240
Pronethalol 16
Propranolol 145, 240, 336
Prostaglandin A^1 159
Prostaglandin E^1 336
Proximal convolution 193
Pulmonary circulation 240
Pulmonary vessels 306

Rabbit aorta 262
Rat 201, 257
Rat hippocampus 233
Rat paw edema 74
Refractory period, effective 145
Regression line for pepsin and H^+ 325
Reserpine 159, 217
Resonium A 27
Ribonuclease 97

Sanocrysin®
Schizophrenia 52
Seclazone 164
Seizure threshold 233
Serotonin 233, 294, 306
Serum calcium decrease 85
Serum magnesium decrease 85
Serum phosphorus increase 85
Shock 1, 226
Sleep time 294
Smooth muscle 281
Social behavior 35
Sodium balance 270
SP 54, 74
Steroids 201
Stimulation, extreme 217
Sulfapyridine 97
Sulfated polysaccharide 74
Sympathetic ganglia 16
Sympathomimetic amines 240
Sympathomimetics 145
Synergy 294

Tetramethylammonium bromide 16
Δ^9-THC 41

(−)Δ^8-*trans*-Tetrahydrocannabinol 115
(−)Δ^9-*trans*-Tetrahydrocannabinol 115, 204
Trasylol® (Aprotinin) 1
Tremors – convulsions 85
Tryptic hydrolysis 80
Tryptophol 294

Urinary enzymes 300
Urine analysis 52
Urine excretion 52

Vagal stimulation 285
Vascular reactivity 226
Vasotropic effect 74
Ventricular extrasystoles 145
Vitamin-E deficiency 201

Wheel activity 41

Vol. 9, 1973

Pharmacology

International Journal of
Experimental and Clinical Pharmacology

Editors:
B.B. Brodie, Tucson, Ariz.

Editorial Staff:
G.L. Gessa, Cagliari
B. Holmstedt, Stockholm
O. Hornykiewicz, Toronto, Ont.
K. Karzel, Bonn
R. Domenjoz, Bonn
O. Kraupp, Wien
P. Lechat, Paris
K. Lederis, Calgary, Alta.
E.G. McQueen, Dunedin
K. Mörsdorf, Bonn
E. Vesell, Hershey, Pa.
F. Sjöqvist, Stockholm
G. Zbinden, Zürich
G. Zetler, Lübeck
P.A. van Zwieten, Amsterdam

S. Karger · Basel · München · Paris · London · New York · Sydney

Contents

Tauber, P.: Inhibition of Lysosomal Plasminogen Activator Activity in Experimental Shock 1
Krstić, M.K.: The Origin of the Hypertensive Effect of Arecoline in Rats 16
Hohenegger, M.: Potassium-Escape Phenomenon in Rats during Continuous Application of Amiloride. IV. Etiology of the Escape Phenomenon 27
Masur, J.: Labor Division of Rats under the Influence of Prolonged Administration of (−)Δ^9-*trans*-Tetrahydrocannabinol 35
Drew, W.G. and Miller, L.L.: Differential Effects of Δ^9-THC on Locomotor Behavior in Activity-Wheel-Habituated and Nonhabituated Rats 41
Kalbhen, D.A. and Braun, G.: A New Concept and Further Support for the Importance and Occurrence of 3,4-Dimethoxyphenylethylamine (DMPEA) in Urine of Schizophrenic Patients 52
Drew, W.G. and White, R.P.: Neuropharmacological Comparison of Cyclazocine and Imipramine 65
Kalbhen, D.A.: Pharmacological Studies on the Anti-Inflammatory Effect of a Semi-Synthetic Polysaccharide (Pentosan Polysulfate) 74
Stančíková, M. and Trnavský, K.: Study of the Antiproteolytic Activity of Fenamates and Indomethacin 80
Herman, E.H.; Mhatre, R.M.; Cooney, D.A., and Lee, I.P.: A Comparison of Some Pharmacological Effects of *Escherichia coli (E. Coli)* L-Asparaginase and *E. coli* Endotoxin in Rabbits 85
Datta, R.K. and Antopol, W.: Influence of Methadone and Sulfapyridine on Mouse Liver and Brain Ribonuclease and Deoxyribonuclease 97
Gardey-Levassort, C.; Olive, G.; Sadeghi, D., and Lechat, P.: Action of Probenecid on the Central Nervous System of the Rabbit. I. Effects on the Elimination of 5-Hydroxyindolacetic Acid 107
Karniol, I.G. and Carlini, E.A.: Comparative Studies in Man and in Laboratory Animals on Δ^8- and Δ^9-*trans*-Tetrahydrocannabinol 115
Feller, D.R. and Lubawy, W.C.: Interactions of the Hexobarbital Enantiomers with Rat Liver Microsomes 129
Orsingher, O.A. and Fulginiti, S.: Influence of Peripheral Mechanisms on the Facilitatory Learning Action of Amphetamine and Nicotine in Rats 138

Giuliano, H.: A Special Adrenergic Receptor Mediating Ventricular Fibrillation and Shortening of the Effective Ventricular Myocardial Refractory Period and its Blocking 145

Saccà, L.; Rengo, F.; Perez, G.; Chiariello, M., and Condorelli, M.: Effects of Hypotensive Doses of Prostaglandin A_1 on Plasma Glucose, Free Fatty Acids and Insulin in Reserpinized Dogs 159

Berger, F.M.; Bates, H.M.; Diamantis, W.; Kletzkin, M.; Plekss †, O.J.; Sofia, R.D., and Spencer, H.J.: The Pharmacological Properties of Seclazone (7-chloro-3,3a-dihydro-2H,9H-isoxazolo [3,2-b] [1,3] benzoxazin-9-one). A New Anti-Inflammatory Agent 164

Bahr, V. von; Borgå, O.; Fellenius, E., and Rowland, M.: Kinetics of Nortriptyline (NT) in Rats *in vivo* and in the Isolated Perfused Liver: Demonstration of a 'First Pass Disappearance' of NT in the Liver 177

Meng, K. and O'Dea, K.: Peritubular and Intraluminal Concentrations of Diuretics Effecting Isotonic Fluid Absorption in the Kidney Tubule 193

Pinelli, A. and Formento, M.L.: Urinary Steroid Profile in Vitamin-E-Deficient Rats . 201

Dubinsky, B.; Robichaud, R.C., and Goldberg, M.E.: Effects of (−)Δ^9-*trans*-Tetrahydrocannabinol and its Selectivity in Several Models of Aggressive Behavior 204

Nikulcheva, N.G. and Ryzhenkov, V.A.: Effect of Reserpine on FFA Mobilization Caused by Extreme Stimulation of Animals 217

Soares de Moura, R.; Rodrigues, H., and Sollero, L.: Hydrocortisone and Vascular Reactivity in Dogs with Hemorrhagic Shock 226

Nasello, A.G. and Marichich, F.S.: Effects of Some Cholinergic, Adrenergic and Serotoninergic Compounds, Glutamic Acid and GABA on Hippocampal Seizures 233

Schuster, J. and Ihli, M.: The Mechanism of Some Sympathomimetic Amines 240

Jukes, Christine; Goulding, Ailsa, and Irvine, R.O.H.: Effects of Hydrochlorothiazide and Amiloride on Potassium Distribution in Skeletal Muscle of the Rat . . 257

Williams, Patricia B. and Hudgins, Patricia M.: Actions of Hydrocortisone, Desoxycorticosterone Acetate and Progesterone on ^{14}C-Norepinephrine Uptake and Metabolism by Rabbit Aorta 262

Holzer, F. and Hohenegger, M.: Potassium and Sodium Balance in Conscious Rats during Continued Natriuresis 270

Ugarte, G.; Pino, M.E.; Pereda, T., and Iturriaga, H.: Increased Blood Ethanol Elimination in Rats Treated with Halothane 275

Kadlec, O.; Bauer, V., and Šeferna, I.: An Indirect Action of Papaverine in Smooth Muscle *in vivo* 281

Hadházy, P.: Actions of Glucagon and Dibutyryl Cyclic 3′,5′-AMP on Chronotropic Responses to Vagal Stimulation and Acetylcholine 285

Blum, K.; Calhoun, W.; Merritt, J.H., and Wallace, J.E.: Synergy of Ethanol and Alcohol-Like Metabolites: Tryptophol and 3,4-Dihydroxyphenylethanol . 294

Trnavský, K. and Rovenský, J.: The Influence of Gold Salts on the Urinary Enzyme Level 300

Türker, R.K.: Presence of Histamine H_2-Receptors in the Guinea-Pig Pulmonary Vascular Bed 306

Braun, U. and Kalbhen, D.A.: Evidence for the Biogenic Formation of Amphetamine Derivatives from Components of Nutmeg 312

Volicer, L.; Polgar, P.; Rao, S.I.N., and Rutenburg, A.M.: Localization of the Cyclic AMP System in the Arterial Wall 317

Kowalewski, K. and Kolodej, A.: Correlation between the Outputs of Pepsin and HCl by Isolated, *ex vivo* Perfused, Canine Stomach Stimulated with Humoral and Cholinergic Drugs 325
Geumei, Aida; Bashour, F.A.; Swamy, B.V., and Nafrawi, A.G.: Prostaglandin E_1: Its Effects on Hepatic Circulation in Dogs 336
Daniels-Severs, A.; Goodwin, A.; Keil, L.C., and Vernikos-Danellis, J.: Effect of Chronic Crowding and Cold on the Pituitary-Adrenal System: Responsiveness to an Acute Stimulus during Chronic Stress 348
McDonald, T.P.; Woodard, Dolores, and Cottrell, Marilyn: Effect of Nicotine on Clot Retraction of Rat Blood Platelets 357
Nykänen, P.T.; Ahtee, Liisa; Himberg, J.J., and Paasonen, M.K.: The Uptake and Metabolism of Noradrenaline in the Isolated Heart of Spontaneously Hypertensive Rat 367
Hemmati, M.; Rezvani, A., and Djahanguiri, B.: Prevention of Aspirin-Induced Gastric Ulceration in Rats by α-Methyldopa and Disulfiram 374

Obituary – Prof. N.P. Buu-Hoi – 1915–1972 57
Book Reviews 59, 127, 252, 324, 377
Authors' Index 380
Subject Index 381

S. Karger · Basel · München · Paris · London · New York · Sydney
Arnold-Böcklin-Strasse 25, CH–4011 Basel (Switzerland)

All rights, including those of translation into other languages, reserved.
Photomechanical reproduction (photocopy, microcopy) of this volume or parts thereof without special permission of the publishers is prohibited.

© Copyright 1973 by S. Karger AG, Verlag für Medizin und Naturwissenschaften, Basel
Printed in Switzerland by Thür AG Offsetdruck, Pratteln